WHAT IS RAMP METERING?

Ramp metering is a traffic management strategy, which uses traffic signals and accompanying equipment and techniques to manage onramp flow onto the freeway system.

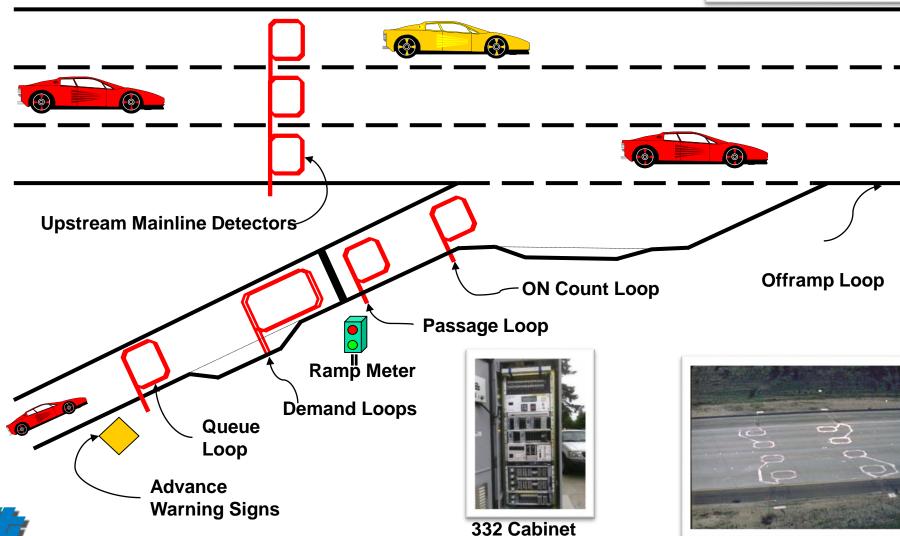






EQUIPMENT







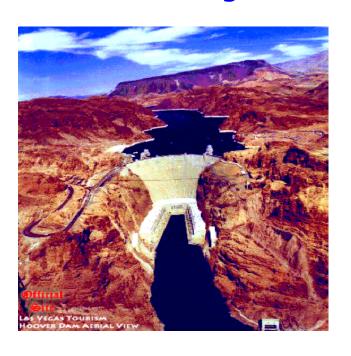
Deputy Directive DD-35-R1Ramp Metering

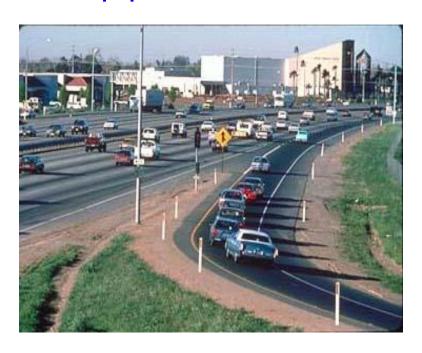




RAMP METERING BENEFITS

1. Reduce Congestion: Breaks up platoons





- Meters work like dams
- Meters prevent flooding of the downstream bottlenecks by 'managing' the upstream flow





RAMP METERING BENEFITS

2. Utilize Capacity of Corridor

- Route
 - Different ramp
 - Frontage road
 - Surface street
- Time
 - Earlier
 - Later
 - Not at all

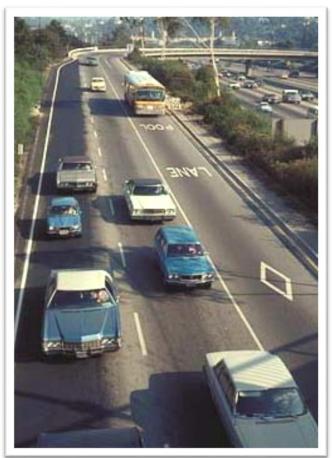




RAMP METERING BENEFITS

3. Encourage Modal Shift





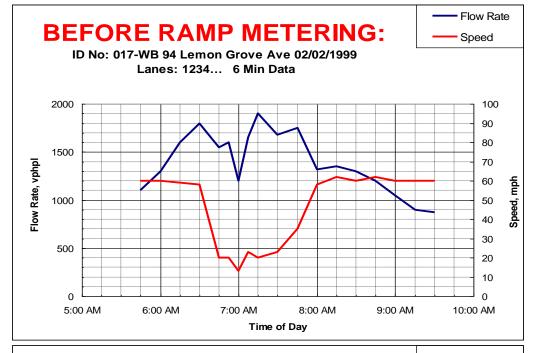


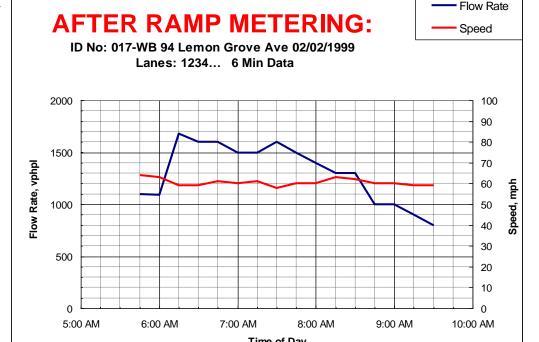
RAMP METERING BENEFITS

California Projects:

San Diego WB 94 Study

1999

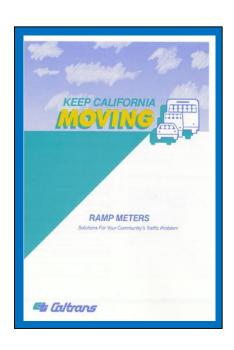






THE FUTURE OF RAMP METERING

- Coordination of Meters & Signals
- Corridor Metering
- 24 Hour Metering
- Metering Algorithms
- Coupled with VariableSpeed Limit







LESSONS LEARNED: PLANNING

- In PID/PSR, make sure to incorporate all ramp metering work to be done (storage capacity, acceleration length, number of lanes, HOV lane, etc.)
- In scoping, consider all possible issues associated with metering operations, storage, acceleration distance, auxi lane, and access management
- Consult RMB to ensure the accuracy of data used on environmental documents and traffic impact reports

